

CATHOLIC ART QUARTERLY



THE CATHOLIC ART ASSOCIATION

President's Page.....	1
Art and Mathematicism	3
The Roman Minuscule.....	13
Hewing to the Melodic Line.....	20
Man The Maker.....	25
Who's Who and What.....	31
C.A.A. News.....	31

MICHAELMAS 1945
VOLUME VIII
NUMBER 4

*Daprato Library
of Ecclesiastical Art*

The Catholic Art Quarterly

Official Bulletin of the Catholic Art Association
Printed four times a year, Christmas, Easter, Pentecost, Michaelmas cycles,
at St. Cloud, Minn., with ecclesiastical approbation

ADVISORY BOARD

Dom. Damasus Winzen, O.S.B.
Rev. Paul Hanly Furfey, Ph.D.

Sister Esther, S.P.
Lee Bowen, Ph.D.
Graham Carey

EXECUTIVE COMMITTEE

Rev. E. M. Catich, president
St. Ambrose College
Davenport, Iowa

Sister Philomene, C.S.J., secretary
College of St. Catherine
St. Paul, Minnesota

Rev. E. B. Kron, C.S.P., editor
Old St. Marys
Chicago, Illinois

Frank F. Seaman, treasurer
340 Parkwood Ave.
Springfield, Ohio

COMMITTEE CHAIRMEN

Ann H. Grill, professional
6332 N. Magnolia Ave.
Chicago, Illinois

Sister M. Joanne, S.N.D., educational
1111 W. Bancroft
Toledo, Ohio

Business Communications and changes of address should be sent to the secretary, Sister Philomene, C.S.J., College of St. Catherine, St. Paul, Minnesota.

Articles intended for publication should be sent to the editor, Edwin Butler Kron, C.S.P., Old St. Marys, Chicago 5, Illinois.

Since the *Catholic Art Quarterly* appears only four times a year and space is consequently valuable, the policy has been adopted of not publishing material that is easily accessible in secular sources unless it is presented from a new or important angle, or is given a Catholic interpretation, and is in accord with Catholic Art Association principles.

C.A.A. MEMBERSHIPS AND PRIVILEGES

SUSTAINING MEMBERS contribute \$25.00 annually toward the maintenance of the Association's work, receive the *Catholic Art Quarterly*, vote in all elections, and have access to the library and the exhibits.

PATRONAL MEMBERS contribute \$5.00 annually and have the above privileges.

INSTITUTIONAL MEMBERS (schools, clubs, etc.) as a group contribute \$5.00 annually, send two voting delegates to conventions, have extended exhibit privileges, receive a subscription to the *Quarterly*, and may use the library and exhibits.

INDIVIDUAL MEMBERS contribute \$2.00 annually, receive the *Quarterly*, have one vote in all elections, may enter work in the C.A.A. exhibits, and may use the library.

National and regional conference privileges are shared by all members. Any member approved by the Advisory Board is eligible for office in C.A.A. elections.

The Catholic Art Quarterly

VOL. VIII

MICHAELMAS 1945

No. 4

Official Bulletin of the Catholic Art Association

Printed four times a year, Christmas, Easter, Pentecost, Michaelmas cycles,
at St. Cloud, Minnesota, with ecclesiastical approbation.

PRESIDENT'S PAGE

BIGOTRY is an ugly word. It is a very real thing and, even though many of us have never felt its sting, the lives of our forbears attest to the vicious, numbing anguish of bigotry. We do not like it, of course, but the very nature of our faith enjoins us to tolerate all injuries, whether of speech or of deed. There is no room in the Catholic heart for bigotry, yet we as its victims, through the sufferings of our forbears and of our brethren living elsewhere, are well acquainted with its torment of body and mind.

Invariably bigotry is the result of ignorance, of a narrow outlook on life, of a one-sided view of things, of a partial or confused understanding of the habits, preferences, and beliefs of other groups of people. Thus the world is ignorant of Christianity and, more often than not, bigotted towards us. We have come to accept this intolerant attitude, not as an essential element of our faith, but as a constant companion of it. We therefore, have been victimized, know a great deal about bigotry, its workings, its allies and offspring enough to make us very much aware of its evil nature.

And yet while we Catholics are not inclined to become religious bigots in the strict sense, we nevertheless have that which is the foundation of bigotry in others, namely ignorance of many things. We too, unless we are on guard, are prone to bigotry's enticement and misdirection, if not so much in religion, certainly in other spheres of conduct.

In a word, intolerance and bigotry are not restricted to religion; they are defects which mar every field of human endeavour. They crop out in politics, in social life, in inter-racial contacts, in business life, in science and art. Our modern age prides itself on its broad-mindedness and sympathy, its tolerant spirit, and yet peculiarly, perhaps never in history has such obdurate opinionativeness existed as in the present day of agnosticism and materialism, an age which predicates the non-existence of the Absolute.

As Catholics we may not claim exemption from bigotry just because we are not religious bigots. We are just as prone, as are other members of our race, to be intolerant of others and of their ideas, of what is truth or of what is right. We are the children of our age, albeit Catholics, breathing the agnostic, material air of our time. We

must beware lest we contract the destroying cancer of our agnostic and presumptuous contemporaries. Strange as it may seem agnosticism and cocksureness are often twins; "I have no absolute truth to hem me in; but I know what I like." Most assuredly; if there is no unchanging truth, no Absolute then "each to his own taste", "de gustibus non est disputandum", "one man's meat is another man's poison", must be our watchwords.

In matters of religion we are not privileged above our brethren who may be less enlightened in religion. Thus a peremptory rejection of contemporary art as non-artistic on the grounds that we don't like it is simple, enormous bigotry. One may not appreciate the objective and subjective aims of Picasso, nor agree with the visual achievements of Kandinsky; one may despise the sophisticated naivete of Matisse or a Klee, but such reproofs in nowise invalidate their creative efforts.

Now no attempt is made here to approve or to disapprove of any or all contemporary art, nor to show its merits or shortcomings; our position is simply a plea for less bigotry and more tolerance in evaluating contemporary art. Because one may not be capable of ingesting non-objective graphic and plastic effort, surrealism, impressionism, and the like, one is not at liberty to spew forth ridicule against that type of creative endeavour. He is at liberty to dislike such art and to speak his dislike; he is beyond reproach if he chooses to ignore it and he is free of blame if he is incapable of understanding its inner implications. But he is not blameless, if, because of his unreasoned prejudice for that kind of art, he attempts to posit a universal, categorical refutation of that art on the strength of *his* particular dislike.

The individual like or dislike is no clue to the logic or illogic of a thing yet how often have we heard it said, "I don't like that; how can you say that *that* is art?". How often too, have we heard St. Thomas skim-quoted by the dialecticians expostulating: "'id quod visum placet', meaning, that which being seen pleases is art; but I see it and I am not pleased and therefore it is not art." Because a painting or sculpture incurs one's dislike by no conceit is one entitled to disallow it as art, and conversely, one may not qualify a work as art simply because it is liked. A creative work, no less than our faith, is not disenfranchized by prejudice, neither by intolerance nor by bigotry. It is discredited only by its lack of intrinsic logic.

We protest being victims of bigotry, yet too often and almost in the same breath, we turn about and become bigots in other spheres of activity. We gag at swallowing gnats and greedily devour elephants. Before we as Catholics may lodge complaint against our detractors we ought to examine ourselves to learn if we are guilty of like transgressions. As the Evangelist pertly admonishes us; we must first remove the stick from our own eye before complaining of the speck in the eye of another.

Art and Mathematicism

Graham Carey

1. THE PROBLEM

IT has long been obvious that all is not well with "the arts", and there have been many attempts to restore them to perfect health. Among these has been the proposal that designs can be improved by the conscious application to them of certain mathematical principles. Regular pentagons, the root rectangles and the rectangle of mean-extreme ratio* have in particular been studied, and their properties applied to design problems. Prominent among the proponents of such practices have been Jay Hambidge, Denman Ross, Romney Greene, Claude Bragdon and Ouspensky. The question is this. To what extent does such a conscious application of geometric patterns to design improve the work?

2. MATHEMATICS

Mathematics is the study of quantities and of the relationships between quantities. It is an exact science, but it is a bleak one in proportion to its exactitude, for it studies reality through one very narrow window. Everything that can be predicted has been stripped from the realities studied except quantity and the quantitative relationships. What is left is clear and convincing because so much confusing matter has been eliminated, but confusing as it may be, what has been removed is the stuff of real life. The purely mathematical interpretation, though accurate within its own limits, is restricted by the absence of all the factors that have been ignored.

Mathematical statements sometimes still show traces of their richer origins in experience. For example, the axiom "a straight line is the shortest distance between two points" shows in the etymology of its chief words, a picture of the actual situation from which the abstract statement was drawn. Points (*puncti*) were originally metal pins. Line (*linea*) was once a flaxen or *linen* thread, spun from the fibres of the plant *linum usitatissimum*. Whereas "strait" is from *strictum*, meaning narrow, "straight" is the past participle of the verb "stretch". The original observation evidently was: "The shortest distance between two pins is a stretched linen thread."

* The root rectangles are rectangles whose short side represent unity, and long side the square root of 2, 3, 4 or 5 etc. In the mean-extreme rectangle the short side: the long side:: the long side: the sum of both sides. It is also called the rectangle of the Golden Section, or the Whirling Square.

3. ART



Art has been defined as the intellectual disposition by which material is arranged or patterned by other means for an end. The formal cause of the thing made is the pattern or design which is imposed on the material, and the final cause is the purpose to achieve which the activity takes place. In most cases things are made by one person for another,—the cook prepares a meal for the other members of the family, the painter make a portrait for his patron. Sometimes the maker and the user are one, as when a man cuts his own firewood. But whether artist and patron are different people or different aspects of the same person, we notice that it is the artist who is chiefly concerned with the formal, and the patron with the final, causes. And there is a sort of eternal struggle going on here between the designer and patternner, who tends to care about arrangement as the product of his own mind, and to forget about function; and the user who tends to care little for the formal preoccupations of the artist, but much about the use of what has been made *for* his use.

Let me repeat. An object of art is a quantity of such and such a material, or variety of materials in combination. It is also the result of the forces, the means that have changed the materials from their original to their finished state. It is also something that has been called into being as an answer to a need. This last is the aspect that chiefly interests the user. And also it is the product of a human mind. Before it can be made, some projection of it, some plan, diagram, design, specification must exist. The artist must in some way create an “image” of that which he proposes to fashion. The faculty of the mind that projects itself into the future and forms images of things to be made is called the imagination.

4. IMAGINATION

Exactly what is this faculty?

All animals have senses, that is they are equipped with organs which tell them facts about what is going on around them. Sight, hearing, touch, and the rest are the ways in which the mind gathers material on which to work. Without the service of the senses it would be a complete blank—dark, silent, empty. The senses bring to the mind accounts of what is going on outside it.

But this is only half the story. We can open our eyes and see the moving colored shapes of things before us; but we can also close our eyes and still see colors, shapes and movement. We can recall mental

images of things we have seen in the past, and we can imagine things that we hope or plan to see in the future. So also with hearing. We can listen to objective sounds with our ears open, or we can stop them up and listen to imaginary sounds—voices or music—that we have heard before, or that we hope to hear. Memory is thus an activity of the imagination with regard to the past, and creative or artistic imagination is the same faculty working for the benefit of clear, constructive action in the future.

The exercise of the imagination is often pleasant, but it is a mistake, as grave as it is common, to regard this pleasure as the end of the imaginative faculty. Pleasure completes and perfects the healthy functioning of the imagination, but its primary purpose is to enable men to use the experience of the past for the intelligent control of the future. Backward-looking imagination tells us what did happen in such and such circumstances. Forward-looking imagination tells us what may or might happen in such and such circumstances. What is happening in the present we have only to open our eyes and see.

5. IMAGINATION AND NATURE

If we open our eyes and look at natural things in their state of perfection, we see that they are beautiful. Whether we look at stars, clouds, oceans, rivers, trees or animals, we see only beautiful color relationships, space relationships, relations of line and mass. Unless there is something wrong with our eyes, or with the mind behind them, the aspect of perfect natural objects is always pleasing. Unspoiled nature is always beautiful.

And the same is true with our inner sight and our other inner senses. Unless there is something wrong with our imagination, when we close our eyes and see visions there, the colors and shapes of the things we see are no less beautiful. For the imagination too is a part of nature, and if it is healthy—in good order—its products are as perfect, and therefore pleasing, as any other natural thing.

And it follows that if an object of art is made in imitation of a mental image, and if this image is beautiful, that the object will be naturally beautiful in proportion to the artist's skill in imposing his image on the material. So a true work of art, the real product of the creative imagination, has thus always an integrity and organization which it owes to its imaginative origin.



6. "FORM"

Every tool or instrument, properly used, leaves its



characteristic mark on the thing it helps to make. A sentence written with a brush has a different beauty from the same sentence written with a reed. A piece of music played on a piano has a different quality from the same piece played on the organ. The instrument used sets its mark upon the thing made. This is as true of the imagination itself, which may be considered as an instrument, as of any other. It leaves its clearly discernable mark on that which it is instrumental in effecting. The mark which it leaves is what, in the language of the studios, is called "form". As we have just seen, objects of art which have a true imaginative origin have this quality. It is not just beauty, but a particular kind of beauty, the beauty that is the gift of the healthy imagination. As the images are seen in the imagination in terms of certain color relationships, space, line, and mass relationships, so the materializations of these images, visible to the outer eye, show the same "formal" qualities.

We can understand this quality of "form" more clearly perhaps by considering artificial things from which it is absent. Objects may be, and often are, designed and executed with no use of the imagination. They may be constructed with the use of reason alone as with some mechanisms. They may be produced by means of a purely mechanical habit of eye and hand, whereby what the eye sees is interpreted by the hand with no comment from the imaginative faculty at all, as are some naturalistic paintings. Such objects have a coldness and lack of life about them. They have not the warmth and humanity of things which are born in the visionary part of the mind. They do not fit human uses and human needs in a gracious and perfect way,—the way an old coat fits its wearer. They have not the perfect integrity, the just proportion of parts to each other, and to the whole,—those organic qualities. They are as different from real works of art as is true and living poetry, the product of imaginative inspiration, and the dead stuff that is ground out to look like it with the aid of a rhyming dictionary and the rules of prosody.

In short the imaginative products of the mind display a certain interior order. To the extent that this order is quantitative it is capable of being interpreted in mathematical terms. The areas of surfaces may be described geometrically, colors and their relationships may be mathematically defined, as can musical sounds. Spirals have a logarithmic interpretation. Truly conceived artificial things show an order which is in part, at least, describable in the language of the science of quantity.

7. "FORM" IN NATURE

It is also true that the things of Nature have an interior order, a formal principle, which is often capable of being expressed mathematically. Planets and comets travel along paths that are known to the student of conic sections. Crystals show forth the principles of solid geometry. The seeds in a sunflower head are arranged in logarithmic spirals, and the bodies of animals as well as plants reveal an order that is often numerically expressible. Let us look into the matter a little more deeply.

Cuvier was able to bring order into the confusion out of which the biologists of his day were trying in vain to build up a science of paleontology, by his discovery that two forces and not one were apparently at work in the formation of the different species. One of these was the familiar adaptation of organs to function with which Darwin and his followers have made everyone understand the importance. When, in different plants or animals Cuvier found an organ adapted to a certain purpose, but derived from different parts of the organism, he said that these organs were *analogous* to one another. Thus three species of plants might possess thorns, the purpose of all of which is protection, but in one case the thorn might be a development of leaf, in another of stem, and in the third of root. The force which produced the thorn for a single purpose from different parts of three plants was said to be the force of *analogy*.

The other force was a conservative one which seemed to try to bind the organism to its ancestral type. This he called *homology*. It seemed to resist adaptive change, and work for the perpetuation of certain primal patterns and numbers. Thus the plants of the lily family are constructed on the basis of the number 3, the dogwoods on 4, and the rose family on 5. Among animals certain parts of the body, no matter how much they are modified by adaptation to environment, show the same tendency to cling to certain numbers. For example, in the mammals the cervical vertebrae always number seven, whether, as with the giraffe, they are seven long bones, or with the whale, seven flat plates fused together in a single bony knob. The giraffe's seven long sticks and the whale's seven flat plates are said to be *homologous* organs; they are adapted to different functions, but derive from the same part of the body and carry the pattern and the number which are associated with that part of the body. While the functional or analogous changes are environmental, these clings to pattern and number, to "idea", one might almost say, are hereditary. Homology seems to be a disciplinary force in nature, which by emphasizing the symbols of their kinship prevents the adaptive tendency from obscuring too far the order of the various parts of creation.

TC



There is an interesting point here regarding the perception of beauty. Minerals have little need of adapting themselves to their environment, vegetables more need, and animals most of all. So it is natural to expect to find the adaptive or analogous element weakest in the mineral, stronger in the vegetable and strongest of all in the animal world, and the formal or homologous element in an inverse ratio. And so it is. A crystal may be a perfect geometrical solid—all mathematics. Its shape shows no deference to the needs of things living in a world inhabited by other things—to environment. But a cat, though her fur may conceal the number of her cervical vertebrae, seems all adaptation to function, a living being in a changing world, with very little of mathematics about her. Plants seem to us to be in a position between these extremes, and to show a perfection of balance between the forces of purpose and pattern, and this perfection we appreciate as a special kind of beauty. A single rose, for example, displays an orderly arrangement of concentric circles, the outer space being divided into five equal parts—the live petals. This is geometric, and it is admirable. But the living flower also shows an admirable adaptation to the needs of an individual living being, with its own work to accomplish in its own life time. If the drawing of a rose shows too much geometry we feel it to be dry, mechanical, stiff and lifeless; if too little we dislike the drawing as weak, disorderly and romantic. We feel the strangest pull of beauty, when the two forces are in the most perfect balance.

There is here an interesting parallel between Art and Nature. We have already pointed out that in Art, the factor of pattern or arrangement, the expression of inner order, often interpretable in terms of mathematics, works in a sense in opposition to the factor of purpose or use. There is often a struggle between the maker and his interest in "form", and the user with his interest in function. The thing made both looks forward to its useful end and backward at its mental origin. The artistic problem is to strike the proper balance between the claims of formal and final causes, but it is balance not always easy to achieve.

St. Thomas wrote: "*Ars imitatur Naturam in sua operatione.*" The imitation of nature by art consists in art's working in the same way that Nature works. As the human artist must reconcile in his work the claims of form and end, so apparently does his Divine Prototype. The Darwinians held that the Creator performed His wonders of creation by means of a single principle, adaptation to function. Sir James Jeans has described God as "The Great Mathematician". Perhaps we can say that both are right in what they assert, and only wrong in what they implicitly deny. The Darwinian God of Analogy and

Jeans' God of Homology are one and the same. These are but two of the Divine Names.

In any case we notice here that the "formal" element exists in natural as well as in imaginatively conceived artificial things, just as the final element, and the apparent rivalry between them do. It is this formal element that the advocate of the use of the geometric shapes in art wishes to apply to his own work. We repeat our original question. To what extent does this conscious application of geometric patterns to design improve the work?

8. THE BASIS OF "FORM"

Up to this point I have written nothing but well established truths. Few would deny any of the statements I have made. The only possible element of originality is in the arrangement of this generally accepted material. But the explanation to which the argument seems to lead, of the relationship between the "formal" in nature and the "formal" in art is hypothetical—guesswork. The hypothesis may be stated as follows.

The shapes of many crystals have already been related to the structure of the atoms of which they are compared. If enough atoms are built together their submicroscopic patterns are made visible to the eye as geometric solids. This accounts for the regularity, consistancy and perfection of the crystal shapes. The crystals of pure substances *must* be consistently regular for they are but the visible expression of that which makes the substance what it is in its own kind, its atomic *form*.

The structures of organisms are much more complex, but must be based upon those of the inorganic world. We now have a purely mechanical explanation founded on the activity of the aux-ins, of why the roots of plants go down and the stems and leaves up. It seems just as reasonable that there is a mechanical explanation for the fact that lilies divide their parts in threes and sixes, as that snow flakes divide their parts into threes and sixes.

As we reach the higher animals we find, as we have seen, the formal obscured



by the more obvious adaptive element, but it must still be there. The materials of the animal body are the same elements as those that make up the plant, and the mineral structures below the plant. Flesh and blood have an atomic structure, as do the rocks and the sap and cellulose of the vegetation that feed them. The atomic and molecular patterns are not absent because they are so small and so swift that we cannot with our most powerful lenses see them.

And the human brain is material also, a vast concourse of sub-microscopic atoms and molecules. The brain is material and the mind immaterial, but the mind operates by means of the brain. How, we do not know. It is hard to find any facts or theories about the mechanics of the brain, that in any way explain the marvelous performances of the mind. But the brain has *some* submicroscopic structure. Its tiny material units must be arranged in *some* fashion, and the quality of that arrangement must lend a quality to the images that the brain naturally produces.

This seems to me to be the explanation for the "formal" or mathematically interpretable quality shown by all true products of the imagination. It also explains the preference of the mind for the "formal" quality in things, in things already made, both of nature and of art.

It also explains a relationship between art and nature. Normal natural things, made up of sub-microscopic units, are affected by the mathematical laws governing the relations of those units. Normal artificial things show a similar set of qualities, for they are products of a mind which has a similar submicroscopic structure.

9. APPLIED "FORM"

So we see that "form" can no more be applied to objects of art, than decoration can be applied, or beauty itself applied. Rouge brushed on to the faded cheek may give to the dim sighted an appearance of health and youth, but it cannot give the reality, and even the appearance is not exact. However there are cases in which geometric techniques may be legitimately used in art. We can think of three good reasons for such use. First, the mere handling of the tools of the geometer will of itself impose geometric shapes. If you use the straight edge and compasses in the laying out of areas to be painted or carved, not only the circle and the square, but the root two rectangle will naturally result. There is no question but that the root two rectangle has been consciously used in design for thousands of years by the Egyptians in their reliefs, by the architects of the Middle Ages for windows, and by ourselves for letter paper. The mere handling of

square and compass suggests it. There is certainly nothing wrong in this.

Secondly, if the geometric shapes to be used, and their various properties, are so well known that they may be clearly seen in the mind, and form there an integral part of the creative image to be imposed, there would be no harm, and perhaps much good, in using mechanical means to materialize them. We are all familiar enough with the idea "circle" to be able to visualize a perfectly circular table. So visualized, the reasonable way to lay out this circle in the wood is to use two points and a stretched line. If we should want an elliptical table, and can see a really clear image of what we want, there is similarly no harm in laying out the ellipse in the most direct way, with three points and a stretched line. Similarly with the root rectangles. If we know the root three rectangle so well as to be able to see its proportion with all its subtleties in our mind, and our design integrated in terms of these, then it is mere common sense to lay out the frame work and the nodal points by the appropriate mechanical means. But, in the cases of the rectangles, does anyone visualize as clearly as that? Does not the artist rather construct his rectangle and its significant points first, outside the imagination, and then apply to the orderly framework so prepared the elements of his design, bit by bit, hoping that the scheme upon which they are being hung, will relate these elements to each other in a formal, impressive and beautiful way?

And lastly there is symbolism. In times past special numbers and proportions and geometric shapes have been consciously used in architecture and other arts, because these numbers and shapes carry analogical meanings. The intention here is clearly intellectual, not aesthetic. A candlestick carrying seven candles means more than one carrying six or eight. It is not necessarily more beautiful in any superficial sense. So a court-yard might be exactly laid out as a rectangle of mean-extreme ratio, in order to express perhaps some of the ideas from which the Golden Section stood in the minds of Plato and his disciples—justice, temperance, the mean. But such a court-yard would be no more beautiful, in the studio sense, than one which had been laid out a little longer or a little wider. Religious men wish to do as God does, to build as He builds, to impose on their little works an orderliness which will reflect in its own small way the great orderliness of His universe. They do not seek after aesthetic pleasures.

10. CONCLUSION

And this brings us to our conclusion. The application of mathematical principles to artificial things, does not increase the formal element—imaginative beauty. Except for the three types of situa-

tion noticed above, when the use of tools or a strong imagination or a clearly symbolic purpose, justify the application of mathematical shapes to designs—such a practice is the result of self-deception. Most of the designers who have taken the method up have later laid it down again, disillusioned. As far as I know, there have never been any controlled experiments to show whether or not the application of mathematical shapes really increases formal beauty. As to the geometric analyses that have been made of already existing objects of admitted beauty, such an enormous variety of rectangular combinations can be constructed, that they can be made to fit anything. With the same good will and ingenuity, ugly objects will yield results just as convincing as do beautiful ones.

The formal element in artifacts comes from the imagination of the artificer, and the imagination works best when properly fed and then left alone. Mathematical formularizations are ideas drawn from actual material situations, and the order they express is only applicable to those same, or similar, situations. It is not applicable to all situations. We may appreciate better the perfection of a sunflower head if we know something about logarithmic spirals, but it does not therefore follow that a wooden hat rack, to the design of which the same spiral has been applied, will be more beautiful than a plain one. I have seen this very experiment, and can state unequivocally that it was not successful. We appreciate the beauty of a thing when we appreciate its inner order and perfection, but that order and perfection, must be its own—not that of anything else.

Mathematics is an expression of truth. Mathematicism, or the application of mathematics to the wrong situation, is an expression of falsehood. It can yield neither goodness nor beauty.



The Roman Minuscule

E. M. Catich

MAJUSCULES are letters which are all of approximately the same height; that is they are roughly contained between two horizontal lines. Minuscules, on the other hand, are letters which are roughly confined in three spaces, between four horizontal lines. The middle space is occupied by the "body" of the minuscule letter, the two upper spaces by the "ascenders", and the two lower by the "descenders". The letter e is one which has a body only; h is an example of one with an ascender; and p is one of those having a descender.

HOPE

hope

The weight of letters—whether they are thin and delicate or heavy and thick—is measured in terms of a ratio between the width of the pen stroke and the height of the letter. The standard pen stroke is called "stem-width", and is the width of the vertical stroke, a little narrower than the width of the writing tool. As the pen is held so that the thin edge, and the thin stroke it makes,

forms an angle of about 35 degrees with the horizontal (30 degrees in the case of Majuscules), the vertical is obviously not the strongest stroke the pen can make, but it is the one used in determining letter-heights and weights. The stroke from upper left to lower right is the strongest, and the opposite diagonal the weakest, of all the kinds of strokes of which our letters are made.

The body of a minuscule is usually between four and six stem-widths high. A height of five stem-widths is a good average. In the large plate the ratio is $1:5\frac{1}{2}$. A little more variation is allowed in the ascenders, which are usually about eight stem-widths high, however, in the plate they are nine stem-widths high. The letters b, d, f, h, k, and l have ascenders of the same height. The descenders, except that of q, are usually a little longer and are allowed a little more freedom of fancy. The notion that minuscules are one-half as high as majuscules is not correct. Actually a minuscule of five stem-widths goes well with a majuscule of eight. The ascenders of minuscules are ordinarily as tall as the majuscules with which they are written. Thus when the majuscule E is eight, the body of the related minuscule d is five, and the ascender of the eight stem-widths high.

æ a E d h

neither too heavy and crowded nor too light and weak. If the vertical space is sufficient for the three almost horizontal strokes of S, the body of no other minuscule letter, written with the same pen, will be crowded in it. A good trial word for still further checking of the height so determined is "sake".

sake

The strongest, blackest and most easily read of the strokes is the pull from upper left to lower right, as in the first stroke of the majuscule V, or the oblique stroke in the majuscule N. This is a direct result of reed writing, and is an essential instrumental character which should be emphasized as much as possible.

areo mea

Conversely, the stroke made by the thin edge of the reed is the weakest stroke, the one which disappears first with distance or fading light, and should therefore be suppressed as much as possible. The insistence on the strong downward oblique stroke, and the calculated minimizing of the thin stroke, account together for the sharply defined internal angles, and the decided flatness of the curves, in good minuscule writing. This flat, angular quality, though present in majuscules, is even more pronounced in minuscules where there is greater freedom to stress thicks and avoid thins. In k, v, w, x and y the upper right oblique stroke is neither rounded nor turned in, but has an outward swing. If hooked back there would be a tendency to confusion with other letters, k would resemble the majuscule R with an extended stem, V a back-slanted b, etc. The dots over i and j are short, medium-thin strokes similar to the right stroke of v. If made too thick the letter becomes top-heavy. The dot was a late addition for the purpose of

ij. k = R

distinguishing an ill-written i from an ill-written e. J is no more than a variant of I. The dot is therefore inessential to the letter and for this reason should not be over-emphasized.

In minuscule writing many of the "verti-

cal'' strokes are actually somewhat inclined from the true vertical. An example of this is the first stroke of u. In t, l, the final stem of h and n, and the last two stems of m, this inclination is even slighter. It is indeed hardly perceptible

but it is nevertheless characteristic and necessary to good minuscule writing. Notice also, in the illustration, the abrupt angular transition between the stem and the curve, and the point at which this transition occurs.

We notice together here a number of details in the writing of letters, most of which have to do with horizontal strokes. The crossbar in f and t is placed so that its top meets the writing line. The upper arm of c and both arms of s are quite flat. The mid-bar of e may be extended to the right to add further distinction between e and c. It is the characteristic strokes of e, as we understand when we know the true sequence of strokes in majuscule E, and the development of the minuscule from the majuscule. The lobe-arm of d is very flat, meeting the stem at almost a right angle. If it is curved only a little it begins to look like the combination "cl". To prevent the stem of d from looking like l, there is no foot-serif on d. The printer's minuscule q is rejected because it looks too much like an ill-formed minuscule g. In its place we use the majuscule Q properly adapted in size to the other minuscules.

The body of g is about four stem widths high, or about four-fifths as high as the minuscule o. But it is not a miniature o. The descender is somewhat triangular in shape, and is made in one movement or stroke. The whole g is made in two strokes, or in three if the short horizontal head-bar is added, which for historical

reasons is often considered a characteristic of the letter. When this third stroke is used, its best position is below the writing line, and above the center of the body of the g.

The foot-serifs of a, i, and the final foot-serif of h, m and n are normal serifs. There is no foot-serif terminating the stems of d, f, r, the first stroke of h, k, n, and the first two strokes of m. The head-serif of b, d, h, i, j, k, l, m, n, p, and u are very short; beginning at a point hardly more than one-third of a stem-width from the stem. The second stroke of u has no head-serif. The letters t and l have very large 'foot-

abcdefg
opqrstu
vwxyz
prrrvwx

í j k l m n

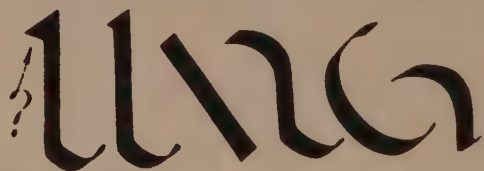
w x y e z

h í j j k l n

x y y e t t

serifs'—or what might be taken for foot-serifs. Actually these strokes are characteristic parts of the letters t and l themselves, being derived from the transitional uncial forms.

The empty spaces inside letters are known as counters, and are very important. Bad letters almost always have bad counters, and good letters always have good counters. The counter expresses the general character of the letter in an abstract way, and can be thought of more objectively, because in itself it has no meaning as a letter. A good designer is as much concerned with the internal shapes as with the outer edges or profiles of his letters. It is most important to appreciate the principle that the areas of the counters should always be greater than those of the spaces between letters. When, for example, they are equal or almost so they compete with each other for reader-attention, and not infrequently new "letters", whose "parts" are the interspace and the parts of adjacent legitimate letters, are suggested to the reader. The counter is a component part of the letter, whereas the interspace is a chance shape with no significance in reading. The significant should be emphasized and the insignificant suppressed. This



is an important reason why Black Letter, Old English and the like,—where there is competition for attention between counters and interspaces—are illegible and therefore bad. The word "minimum" illustrates the principle involved.

minimum
minimum

Letters exist to carry meaning, and it must never be forgotten that their primary purpose is legibility. Nevertheless there are times when considerations of significance and legibility should be boldly put aside, and the attention of the writer concentrated solely on "design". It is for this reason that the kind of "writing" shown at the end of this paragraph is useful. Its purpose is not communicative but educational. The best calligraphers are apt to misspell words, because their

attention is concentrated on the formal part of their problem. Here the student is free not only from the distractions of spelling, but from every other significance or meaning of the "letters" and "words". He is free to concentrate upon the proper use of the reed as a writing instrument and the emphasizing of the pulled strokes and eliminating of thins; or upon spacing and the avoidance of either black "spots" or white "holes" in the pattern; or upon learning to write without guide lines. This "writing" usage is not a denial of the importance of final causes in writing, but a shift over to a temporary educational first cause, when working in an educational situation. Its ultimate purpose is the legibility of the writing of the trained calligrapher.

Great. B. I. Q. & I. R. E.
B. I. E. A. I. G. & R. T. E. I. V.
& R. T. E. I. S. I. O. R. & V.

If he has ever used it, the serious student should discard at once the crutch of ruled lines. Most people today write their letters without the help of horizontal guides, and accuracy here is surprisingly easy to acquire. The mind and the eye are quite as much in need of training as is the hand, and the eye and mind learn much faster if ruled lines are eliminated. The hand is really a tool, just as a brush or a chisel is a tool. By itself it can do no more than can a chisel or a brush. If the mind knows and understands the essential principles underlying good letters, it has no difficulty in communicating this understanding to the hand, thus enabling it to make letters conformed to the mind's knowledge. And similarly the mind by its understanding recognizes bad letters, and prevents the hand from making similar bad letters. As has been written. "Art is entirely on the side of the mind."

Hewing to the Melodic Line

William J. Kerrigan

SOME years ago a critic divided all music into three parts: intellectual, emotional, and visceral. I have been entertaining the hope that writers of ecclesiastical song would pay increased attention to intellectual music, in the form of horizontal composition with strict respect for the integrity of selected or invented melodies—especially plainsong melodies.

A few of the terms I have just used require extended explanation. Professional musicians will bear with me while I make them as plain as I can to all.

By horizontal composition I mean polyphony or counterpoint, but not counterpoint as that term is often understood today: that is, not counterpoint written from a figured bass and with harmonistic preoccupations. I mean the combination of two or more different melodies, or of two or more sections of the same melody, so that they can be sung simultaneously yet without any unpleasant clashes. For example, let us suppose that you sing *America* while I sing *The Star Spangled Banner*. That would be counterpoint or polyphony, yet of a primitive sort because of all the discordant combinations we would run into. Now when we combine a couple of different songs like that, but without any clashes, we have polyphony which ought to be tolerable to the modern ear and still conform to the polyphonic ideal.

What is this polyphonic ideal? As I conceive it, it is the full investigation of a melody by showing what parts of it can combine with its other parts, or with some other melody which in itself or in its associations forms an apt commentary to the first melody.

There are well known melodies, simple ones, whose parts combine with one another, such as *Three Blind Mice* and *Oh, How Lovely Is the Evening*. In them, three voices can enter each at a different point and sing continuously, with a pleasing effect. They are known as perpetual canons, or rounds. Another is the hymn, *Non Nobis, Domine*, ascribed to William Byrd. A more elaborate one is Gallus's *Confirma Hoc*:

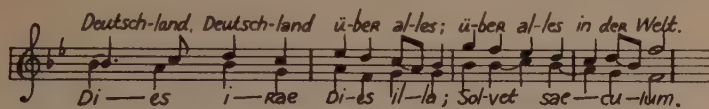
Con-fir-ma hoc De-us quod o-pe-ra-tus es in

Con-fir-ma hoc De-us quod o-pe

Con-fir-ma hoc De-

Con-fir-

In search just now for an illustration of a second melody which would form an apt commentary to a first, I was about to say, "Suppose we could combine the chauvinistic Deutschland, Deutschland Ueber



Alles with the biting commentary of the funereal Dies Irae." Then I wrote out four bars of such a thing to see what would happen.

There is an uncomfortable fourth or two, a couple of eccentric changes into the minor, and a parallel fifth. Yet the ideal is almost achieved. And, in view of current events, the commentary is devastating. We shall return to this example. The curious will note that it ends with the same word in the German anthem and the Latin hymn (Welt-saeculum-world.)

But such a commentary remains adscititious. Were it not for the words of each melody, and the consequent associations, there would be no reason in the world for combining these two songs.

There is a second kind of commentary by which two different melodies are made to combine to show similarity or contrast in their own natures—thus, something grave with something taunting.

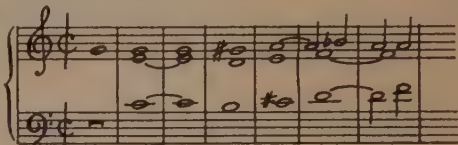
Finally, there is the purely musical commentary which one melody affords another—that is, the two, when put together, simply sound good. Here art comes to the service of taste. And, with the first melody created or given, the composer may fashion at will another or others to go with it, so long as these other tunes, called counter melodies, maintain a complete form of their own, can stand on their own feet and be sung satisfactorily by themselves. If they cannot do the latter, of course, they are not counter melodies, they are mere accompaniments of a harmonized song.

Of this purely musical commentary which one melody affords another the world's music contains abundant examples. Yet one would not think so if one were to survey ecclesiastical composition today. When a man goes to write a hymn or a mass today, his ideal lies as close to that of the Mills brothers as it is to that of Palestrina or William Byrd, not to mention those pioneers of polyphony who rigidly combined melodies willy-nilly without regard to the clashes. Perversely, at present writing it seems that Tinpan alley, rather than Catholic musicians, is beginning to see what the Medieval polyphonists saw—witness I Got Spurs That Jingle Jangle Jingle.

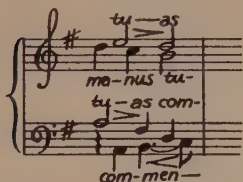
On the other hand, this purely musical commentary has some kinship with modern song. I have early stressed the fact that in writing

polyphony a composer is not seeking to harmonize a melody—he is seeking to combine different melodies, or different parts of the same melody. Yet I admitted that he also must succeed in avoiding unpleasant clashes. As a result, his melodies do harmonize. But the harmony is a by-product.

How important a by-product? Well, historically, a very important one, so that, to many, counterpoint without that by-product would be not quite worth doing. The following quotation from William Byrd (*O Quam Suavis*) may serve as an illustration.



I fancy, however, that it is not an unusual beauty of harmony that the lover of counterpoint hears when he marks a beautiful passage of polyphony. It is rather certain other by-products, or artifices if you will, like the contrast of motion, the contrasting stride of long and shorter notes, the alternately matching and contrasting vowels and syllables in the different voices, and the soaring effect of the melodies over the pedal—all this plus, of course, the recognition of themes in their ever-new surroundings. A single bar of Surianus will illustrate most of these qualities.



Of course, one finds these qualities in the counterpoint of Bach, Beethoven, and Franck as well as in the work of the madrigalists and motet writers of an earlier age.

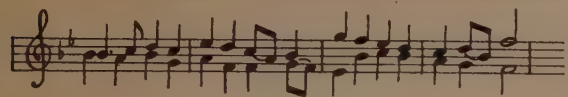
* * *

In truth, counterpoint is intellectual. It combines the idea of one melody with the idea of another melody, not merely the sound of one note with the sounds of other notes. The pleasure is not that of the barber shop chording, nor is it the titillating queasiness produced by the "blue" note. True, the more intellectual counterpoint becomes the more it approaches mathematics, and is impressive only on paper, without being worth listening to. Yet the less intellectual it becomes, that is, the oftener it chooses its notes merely for sound, the greater its distance from the contrapuntal ideal—which is the Church's ideal.

That is why I asked at the beginning for "strict respect for the integrity of selected or invented melodies." To illustrate, I point back to our *Deutschland-cum-Dies Irae*. That piece of music is chiefly intellectual. You would not walk a mile to hear it the second time. In fact, it has points where it is definitely displeasing.

Yet these points, you say, could be "fixed up." Yes, they could. The addition of a third, non-melodic part (called a "parte di rimpieno") would help us out of some difficulties, although it would depart from the ideal. There is an alternative: we may disfigure the mel-

odies—one, the other, or both. Thus we might get the following:



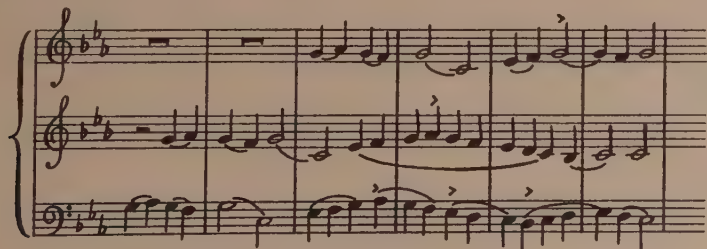
By such "fudging," however, we can completely desert the ideal. For in so far as we give the Dies Irae more than a pleasant variation, an allowable truncation, or a necessary coda—in so far as it is not, in a word, the Dies Irae any more, to that extent the reason for writing the little piece has vanished; there remains but a pointless accompaniment to Haydn's melody.

The intellectual ideal of counterpoint remains only when the composer respects his materials to the extent that his melodies remain distinctly recognizable as themselves. Lengthening and shortening of notes, omissions, additions, changes of intervals and changes of position (as in canons on the 2nd, 6th, and 7th especially) are valid only when they do not violate that fundamental principle.

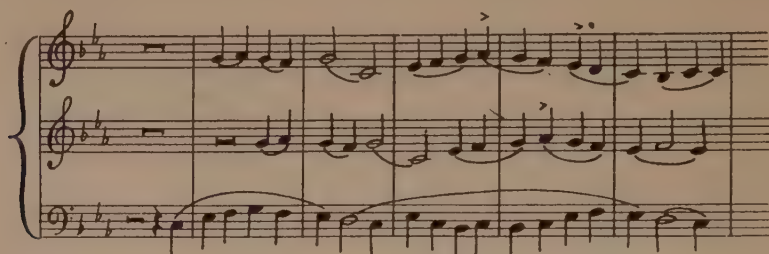
By the same token, we ought not to say that a contrapuntalist has dealt with Gregorian melodies if he has merely used a little stock of plainchant as a point of departure. Doubtless, one could do a very nice fugue on the first notes of the Alma Redemptoris Mater. Doubtless that fugue would be suitable material for church organ. But it would not necessarily be Gregorian.

But go to Palestrina. See what he does, say, with his Ave Maria where the Gregorian material is not left whole and entire, now enhanced rather than changed. In such pieces the composer has served simultaneously the religious spirit of the plainsong, the intellectual ideal of Medieval polyphony, and the sensuous demands of the musical ear. Cannot a man today say something musically brand new and yet serve these same purposes?

Sit down with a Liber Usualis or even a little book of Gregorian masses and see what you can do. The melodies have strange possibilities. For example:



Since the notes are so much the same value, contrast is to be achieved here by alternating slurs and single-syllable notes among the voices.



I have by no means exhausted the canonic possibilities here. But let us add a different Gregorian melody, still with our ideal of integrity:

There is the exciting possibility, of course, that the melodies were once executed in some such combination. Our manuscripts of the music before the Renaissance apparently do not tell the whole story; there are immense lacunae in our libraries; we do not have anything like exhaustive explanation from correlative manuscripts. We are so ignorant that until a few months ago we were making a mistake of a whole hundred years on the date of the *Sumer Is Icenmen In* canon, and have never dared to say where, when, why or how polyphony originated.

However that may be, there is no reason why plainsong melodies cannot be used in a variety of ways today. Of course, if the result is to be most worthy of liturgical performance, such compositions must be thought out in terms of the Gregorian melodies themselves. If I want the *Cum Iubilo Kyrie* melody to be a commentary on the *Orbis Factor Kyrie* melody, I must not use one of them simply as a point of departure for something else. We cannot win the argument by altering the question; we cannot remain solvent by making our 7's look like 9's. We in the choir loft should allow ourselves no more liberty than the preacher in the pulpit, who, if he cannot put Lazarus at the foot of the Cross, or make Bartimeus one of the soldiers who guarded the tomb, patiently tries another tack.

Man The Maker

Gerald Vann, O. P.

GOD the Lover and Creator made us in his own image and likeness, to be lovers and creators in our turn.

He made us to know him and love him and serve him; and since we are made in his image it is by knowing and loving and making that we serve. Knowing and loving are not means to making; making is the effect, expression and fulfillment of knowing and loving. Knowing is not the means to loving; knowledge of the right kind begets love and love begets knowledge. These three together form the footprint of the Trinity in the soul: without knowledge and love there is no life, without making there is no fullness of life.

God made us to know him and love him; and having made also a paradise of pleasure in the dressing and keeping of which we were to be makers, he meant us to know and love it too. But there are two sorts of knowledge: direct knowledge of things and indirect knowledge about things. The human mind tends to become jumbled, like an attic, with the latter; and to forget the former. We become knowledgeable and cease to be seers. Then the soul withers. It is direct knowledge which begets and is begotten by love, and which makes us makers. But in this direct knowledge also there are many degrees of fullness and depth: and it begins to be full and deep only when in our knowledge and love of things we know and love God within them, for only then are their truth and goodness and beauty revealed. 'Love all God's creation, the whole, and every grain of sand in it. Love every leaf, every ray of God's light. Love the animals, love the plants, love everything. If you love everything you will perceive the divine mystery in things. Once you perceive it you will begin to comprehend it better every day.' 'God is alike near in all creatures,' says Tauler, '...and he knows God aright who sees Him in all things.'

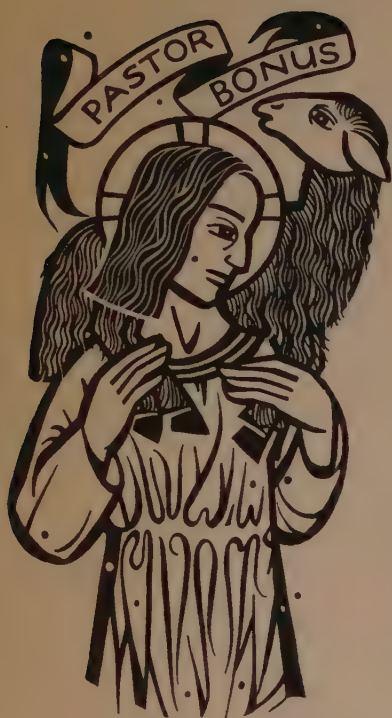
We are made not only to know and love but to serve at tables; not only to know and love God's garden but to dress it and keep it. To know and love things fully is to know and love things in and for God; to make things as we should is to make them in and for God, and out of the fullness of love and knowledge. Only when we see and love and make thus are we fully alive.

These three things are the substance of our lives. Making it meant to be, not the occupation of a leisure hour when work is done, but

itself our life-work. There are endless ways and kinds of making, and we cannot limit the term to the making only of material things: there are tables and statues and ships, poems and songs, food and drink, clothes and clocks and candlesticks, but there is growth in wisdom also, there are the governance of cities and the building of human society, and these latter are forms of making too. But that one or other of these things should be our life-work is our birthright as human beings, for otherwise we are not fully alive. A world such as ours in this century, which robs millions of men and women of their birthright, which condemns them to labour which is not making at all, which herds them into slums that deny all that God intended when he planted the garden, and robs them of their faculty of vision by giving them in their childhood an education which teaches them to know facts but not to see things, and in their maturity the gifts of poverty and economic security so that their whole mind must be bent to the search for money for a meal—a world such as this is an attack on men's souls as well as on their bodies, an invitation not to life but to death.

In what are called the ages of faith men lived in a God-centred universe. They had a right to be happy; but they knew that happiness is to be found only in the loving service of God and of men for God. They failed to live according to their faith; yet they were conscious of the divine order of things and it kept them humble and sane. But when those ages were over men rejected God and his order; they set themselves to build a men-centred world; they glorified humanity and spoke of serving it, but the human soul is not enough of itself to embrace humanity, and the man-centred world became a self-centred world in which each was for himself, and beauty was treasured not as God's gift for the happiness and reverence of all, but as man's property and utensil for the pleasure and aggrandisement of a few. The joy of creation was taken from the common man to become the elegant pastime of a privileged caste. The ugliness of urban England is a monument to the degradation to which the new world led.

The squalor and slavery went side by side with the triumphs and splendours of modern science. For that reason alone they were inexcusable. The inventive genius which produced the machine age, which achieved such great results at so terrible a cost and made Man the master of Nature but men the slaves of the machine, could have produced a different machine age, increasing instead of destroying man's power of creation, and diminishing, instead of vastly multiplying, the drudgery of life. It did not do so because initiative was directed to private profit without thought of the common good, to power without thought of truth and goodness and beauty, to self-worship instead of the worship of God. Within the last century the lot of the poor has indeed been improved in many ways beyond recognition; yet the root



of the evil remains and will remain until the system itself is changed. Only by defeating the system can we defeat the attack upon the human soul, and win back our God-given right to know and love and create.

Drudgery is the wages of sin. 'Cursed is the earth in thy work; with labour and toil thou shalt eat thereof all the days of thy life.' There has always been drudgery since the fall of man. The evil of the machine age is not that it produced drudgery, but that it multiplied it: that too often its labour-saving devices save labour for one by multiplying it for many; that things which before had been produced creatively and joyfully by men as their life-work are now produced uncreatively and joylessly by men who are slaves to the productive machines.

There are some who, in face of the slavery to which the machine has condemned so many, are tempted to regard all work done with the hands as good in itself. But with handwork as with machinework, there is some which is creative and some which is drudgery. Creative work is good in itself because it is creative. Drudgery can be made holy because it is done for the love of God and men; it can be made beneficial for the soul as sickness or sorrow patiently borne can be good for the soul; but like sickness and sorrow it is in itself an evil, the fruit of sin. We do not oppose the attack upon the soul but surrender to it if we thus give away the whole cause for which we ought to be fighting. The inventive genius of man is God-given for the common good of humanity, that we should toil to increase our creativity and eliminate drudgery as we toil to eliminate disease.

But again there are some who hold that we ought not to try to eliminate drudgery or escape the wages of sin: we serve God by toiling with our hands as he told us, and we are only serving Satan if we try to make everything easy by using the machine. This is a naive and materialist reading of the Bible story. It is God's will for us, because it is our nature, which he made, that we should be creators. It is part of the course that sin has brought upon us that creation is hard for us and attended with pain. It is part of the curse too that we should have need to toil uncreatively. But it is part of the curse also that we should toil in the sweat of our brow to work out our redemption

through the grace of Christ, to work out the redemption of work itself, and come nearer again to our true nature as creators. We shall never eliminate drudgery completely no doubt; for even if we eliminate bodily drudgery there would still be the drudgery of the mind. But it is important to distinguish between drudgery and hardship. Drudgery is evil; creation is good; hard work is either good or evil as it is involved in the one or the other. The hardness of drudgery wears down the soul; the hardness of creation stimulates and satisfies it. If we used our genius to plan our work well it would make it more and more creative; it would not necessarily make it less hard. Art involves hard training and discipline; for its perfection it involves above all the hard discipline of making the spirit open and submissive to ultimate goodness and beauty and truth. We are meant to be lovers and creators; but for man, to love and create is hard. And it is the curse that makes it hard.

We should not think of the curse and the hardship as a punishment for evil imposed from without, as a child is deprived of a pleasure because it has been disobedient. The hardship is part of the evil itself, as pain is part of a disease. Heaven is perfect oneness with God; hell is complete separation from God, frozen isolation in selfhood, the impossibility of meeting and touching God. Sin wrenched and disrupted the divine order; separated being from Being; closed man and nature in upon themselves and in disharmony among themselves so that the thorns and thistles which, as Augustine says, were meant to feed the beasts without hurting man, became his enemies, and brotherhood of men themselves was replaced by the strife of Cain. But the disharmony within creation was the effect of its separation from God: that man and all creation with him was lost from God and alone, is the essential meaning of sin. It is the essence also of the hardship of life. To love and create is hard for man because of his isolation from God. 'Is not the heart of man an abyss?' says Augustine. We may turn away from the abyss and refuse to see it, and distract ourselves with easy pursuits on the sur-



face of life as the humanists did; we may have a good time, but we shall not be happy. There is no happiness until the abyss of the heart has been filled; and only the Infinite can fill it. If we make toys within a man-centred universe we avoid hardship; we cannot avoid hell. But if we set out to grow to our full stature, to see and love the whole of reality and not merely its surface and to create in oneness with God, then we shall know the real toil of creation, the toil of re-birth, apprenticeship and struggle. There is toil attached to the exercise of every craft; but it is child's play compared to this struggle of the heart to end its isolation and regain the source of its vision and power. This is the greatest burden which sin has brought upon us and which is with humanity till the end. We need have no scruple then if we can lessen the volume of drudgery in the world; on the contrary, that we should do so is part of our destiny as fallen but redeemed men; for even if we succeeded in freeing ourselves from all work that is uncreative we should still be living within the shadow of the curse: we should still find God, and therefore the depth and grandeur of creation, only in the sweat of our brow.

But there are some again who hold that work is always an inescapably drudgery; and that all we can do is to reduce as far as possible the time we need to give it, and find an outlet for creative needs and capacities in our leisure hours. If this means that we should willingly restrict our making to a secondary plane, it is a betrayal of our heritage. It might indeed be that in a well planned mechanical age the necessary drudgery could be reduced to the proportion of an hour or so in the day, and that having all taken our share in this we should then be free to set ourselves to creative pursuits. But these, if they were worth while, would have all the hardness of creative work; and it would then be these and not the drudgery which would be our life-work. Leisure in its proper sense is essentially a secondary element in life; its whole purpose is to offset our main creative work, to keep us from becoming tired and stale; it should itself be largely creative—there is something wrong about a world in which leisure is devoted exclusively to passive amusement—but it is of its nature subordinate to the main work of creation round which our lives ought to be built.

There are some who of their own free will relinquish a part of their birthright in order to serve God and their fellowmen more fully: who willingly accept the degradation of industrial drudgery that they may help redeem it. They are sharing in the redemptive activity of Christ. They are fulfilling in a sacrificial way the task of the 'common priesthood of the laity': that task which the sacrament of Confirmation lays upon the Christian and empowers him to carry out, the task of helping to bring God to the world and the world to God, going down from the altar as God-bearers into the world that it may be blessed by the grace

and power and glory of the Sacrifice they have been offering. To take upon oneself the cross of industrialism in order to redeem industrialism, never acquiescing in its evils but suffering under them with others in order to destroy them with others, is indeed to turn drudgery into creation on a higher plane, for it is to play a great part in the work of rebuilding the world for God. The Church of to-day has lost the mass of the workers; if they are to be won back it will surely be most of all through this creative prayer and sacrifice of the workers.

‘The Lord God had planted a paradise of pleasure from the beginning.’ We are still called to a creative life, though the garden is no longer a paradise of pleasure and thorns and thistles distress us. But we are called to be creators not to our own glory but to God’s. There is no great art without reverence; the deepest things are revealed only to those whose life is worship. The carpenter who loves his wood, who can tell one kind from another by the feel of it in his hands and who treats it tenderly with understanding and love of its character, will be a good artist; but to be a great artist he must do more than that. He must have vision and power of expression; but again to be a great artist he must have more than that. He must be a contemplative; his vision must reach to the heights of heaven and the depths of the human heart; wherever his hand touches and his heart feels he must touch and feel Infinity. Then his vision and his work will be full and rich and lasting, because he will have filled the emptiness of the abyss and his work will be worship. To all of us the same applies, no matter what our life-work. We may be weak in vision or in the power of expression; but at least we can learn to worship, and then there will be something of greatness in our work because there will be something of greatness in ourselves. To build monuments for man alone is to build in sands that perish; to build in worship is to build in imperishable stone a glory that will never pass away. If we are true to our destiny our creative work will be worship and our worship creative work; so we shall be doubly artists. Yet there is a third way also in which we are called to create and which includes these two; for if we share as we ought in Christ’s redemptive activity we share in his re-creation of the world: we can be through our labours the living stones of that holy city, the new Jerusalem, of which the great voice spoke from the throne: ‘Behold the tabernacle of God with men: and he will dwell with them. . . And God shall wipe away all tears from their eyes; and death shall be no more. . . He that shall overcome shall possess these things.’

WHO'S WHO AND WHAT

THE talent, learning and guidance of Graham Carey has been at the service of the Catholic Art Association from the outset. Members of the Association gratefully acknowledge the debt, but lest there should be a tendency to take this service for granted it is wise to draw attention to the fact at this time. Without Mr. Carey's generous and unstinted assistance, the Quarterly and the Association would be greatly impoverished. In this issue we have "Art and Mathematicism", an article which handles the harried subject of "form" in art with the masterliness we have come to expect from him.

Father Catich concludes the Print-script Series with an article on "The Roman Minuscule", which rounds out an educational series of which the members may well be proud, and from which individual profit has been gained. Likewise, the President of the Catholic Art Association has provided some more cuts which have made the recent issues of the Quarterly such fine examples of what the Association has been advocating.

C. A. A. NEWS

The Eighth Central Regional Meeting of the Catholic Art Association met at The Immaculata, Chicago, Illinois, on Friday, November 23rd, 1945. The theme for the discussions and the exhibit entries related to ART AND THE POPE'S PEACE PLAN.

The Reverend Edwin Butler Kron, C.S.P. celebrated Holy Mass in the school auditorium at 9:30.

Sister Mary Josine, Principal of The Immaculata, welcomed the delegates. Brother Loyola, C.S.C., was General Chairman of the meeting.

The Reverend Joseph B. Lux, Managing Director of *Extension Magazine*, spoke at length of Art and the Pope's

Reverend William J. Kerrigan teaches English and journalism at St. Ambrose Academy, Davenport, Iowa. He formerly directed the St. Joseph's choir in Davenport, for which he composed a Mass and many motets. His articles on music appear in a variety of Catholic magazines, such as the Catholic Choir-master, and The Ecclesiastical Review. He has an M.A. in journalism—perhaps the only priest to possess that degree.

Father Kerrigan did his theological studies at the Pontifical Gregorian university in Rome. One of his diversions while in Rome was singing with the choir of the Pontifical Russian seminary, in order to acquire a more intimate knowledge of the Eastern liturgy and its music.

We have had several requests for a back issue of the Quarterly which contained Father Gerald Vann's "Man The Maker". As this particular issue is out of print and extra copies are difficult to obtain, as thought it would be rendering a service to reprint this very fine piece in this issue of the Quarterly.

Peace Plan. The discussion which followed Father Lux's talk showed that members of the Association were strongly in back of the Association's basic principles.

Sister Stanisla, S.S.N.D., spoke on "How Philosophy Affects Painting."

Mr. Merle C. Sheetz, Department of Public Welfare, discussed "Ideas for the Pursuit of the Good Life and Peace."

During the Workshop period, Mr. John F. Gormley, Indianapolis, gave a demonstration in ceramics; Miss Marguerite Woodward, New York, demonstrated various uses of leather; Mother Ellen, O.S.U., Oak Park, showed wood carving.

The Exhibit related to the theme of the meeting and was of satisfyingly high calibre.

The C.A.A. Professional Exhibited was forwarded to Mr. Renard Koehne-
mann, who has opened a workshop at
Champaign, Illinois.

NORTH CENTRAL REGIONAL MEETING

The North Central Regional Meeting of the Catholic Art Association met at the College of St. Catherine in St. Paul, Minnesota on November seventeenth and eighteenth.

Questioning, watching, experimenting—an enthusiastic crowd of three hundred kept demonstrators busy for three hours Saturday afternoon in the college's Little Theatre. The program was as follows:

Wood Sculpture—John Rood, Professor of Sculpture, University of Minnesota.
Manuscript Writing—Sister Leonardo, Director of Art, Mt. Marty Junior College, Yankton, South Dakota.
Occupational Therapy—Sister Jeanne Marie, Director of Occupational Therapy, The College of St. Catherine.
Etching—Sister Leon, Teacher of Art, The College of St. Catherine.
Stained Glass—Sister Maxine, Holy Family Convent, Manitowoc, Wisconsin.
Silk Screen—William F. Ryan, Art Instructor, Minneapolis School of Art.

High Mass was offered in Our Lady of Victory Chapel Sunday morning. The college choir sang the Orbis Factor Mass with a fifteenth century antiphon by Kungesperger, *Urbs Beata Jerusalem*, at the Offertory.

Following registration in Mendel Hall Father Catich opened the first session with a stimulating talk on "The Contribution of Art to Personality". The lively discussion proved that Saturday's enthusiasm was carrying over to the second day.

Father Roger Schoenbechler from St. John's University, Collegeville, Minnesota, introduced the afternoon session by giving an illustrated lecture on "Symbolism in Teaching Religion".

"Character Formation in the Art of the Home" was treated by Mrs. Theresa Mueller of St. Paul. Her appeal for truthful making and choosing in the home gave to parents the same C.A.A. principles which Father Catich and Father Schoenbechler had given previously to artists and teachers.

Between sessions members saw the application of these principles in the stained glass windows by Father Catich, sculpture by Elizabeth Haseltine Hibbard of Chicago and John Rood from the University of Minnesota, and in paintings and craft work by members and students.

The exhibition took place at the University of Illinois and was very well received.

The National Convention of the Catholic Art Association will be held in Baltimore, Maryland, at the College of Notre Dame of Maryland, April 26th and 27th, the Friday and Saturday following Easter. Among the speakers will be Graham Carey, Ade Bethune, Father Catich, Dorothy Day, and others. There will be demonstrations, discussions and exhibits.

More detailed information will be mailed to each of the members as soon as the program is fully lined up. It will be the first national convention in many years, and an important meeting to which, as many members as can, ought to come.

